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AMENDMENT TO THE CLAIMS.

1. (Currently amended): A method of converting glycerol to 1,3-propanediol in a thermophilic organism, the method comprising:

- a) providing a thermophilic organism that ferments glycerol to 1,3-propanediol and
- b) culturing the thermophilic organism under conditions such that 1,3-propanediol is produced,

wherein the thermophilic organism is a species strain of *Caloramator* or a species strain of ~~*Thermofranchium*~~ *Thermobrachium* having the following characteristics

- (i) a temperature range for growth at pH 6.0 of 33 to 60°C, and
- (ii) a pH range for growth from 5.0 to 7.8 at a temperature of 25°C.

and wherein the 16S rDNA of the thermophilic organism is at least 95% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

2. (Original): The method of Claim 1, further comprising the step of collecting 1,3-propanediol produced by the thermophilic organism.

3. (Currently amended): The method of Claim 2, further comprising the step of polymerizing the 1,3- propanediol into a polyester poly(1,3-propylene) terephthalate.

4. (Canceled)

Claims 5 - 45 (Previously canceled)

46. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under anaerobic conditions.

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47. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under nitrogen.

48. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under argon.

49. (Previously amended): The method of Claim 1, wherein the thermophilic organism is cultured under a mixture of nitrogen to carbon dioxide in a ratio of about 80 to about 20.

50. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured in the presence of an oxygen scavenger.

51. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured in an anaerobic chamber.

52. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under microaerobic conditions.

53. (Previously added): The method of Claim 2, wherein the collected 1,3-propanediol is further purified.

Claims 54 – 56. (Previously canceled)

57. (Previously added): The method of Claim 1, wherein the 16S rDNA of the thermophilic organism is at least 99% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

58. (Previously added): The method of Claim 1, wherein the thermophilic organism is adsorbed on a solid support.

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59. (Previously added): The method of Claim 1, wherein the thermophilic organism is cultured under aerobic conditions.

Claims 60 – 61. (Canceled)

62. (Currently amended): A method of converting glycerol to 1,3-propanediol in a strain of *Caloramator viterbiensis*, the method comprising:

- a) providing a thermophilic strain of *Caloramator viterbiensis* having the following characteristics
 - i) a temperature range for growth at pH 6.0 of 33 to 64°C
 - ii) a pH range for growth from 5.0 to 7.8 at a temperature of 25°C.
 - iii) a 16S rDNA which is at least 99% identical to the 16S rDNA sequence of the organism deposited as ATCC designation PTA-584 and
 - iv) ferments glycerol to 1,3-propanediol; and
- b) culturing the thermophilic strain of *Caloramator viterbiensis* under conditions such that 1,3-propanediol is produced.

63. (New): The method according to Claim 62, further comprising collecting the 1,3-propanediol.

64. (New): The method according to Claim 1, wherein the optimum pH range for growth is from 6.0 to 6.5 at a temperature of 25°C.

65. (New): The method according to Claim 1, wherein the guanine-plus-cytosine (G+C) content of the genomic DNA of the thermophilic strain is 32 mol% measured by high-performance liquid chromatography.

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